

U. S. DEPARTMENT OF COMMERCE
Environmental Science Services Administration

In cooperation with
Cotton Economic Research and
Bureau of Business Research of
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

CLIMATOLOGICAL SUMMARY

STATION BEAUMONT, TEXAS

LATITUDE 30° 05' N
 LONGITUDE 94° 06' W
 ELEV. (GROUND) 18 ft.

MEANS AND EXTREMES FOR PERIOD 1937-1966

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)							Mean number of days						Month	
	Means			Extremes						Mean	Greatest daily	Year	Snow, Sleet			Precip. .10 inch or more	Temperatures							
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean					Maximum monthly	Year	Greatest Depth		Year	Precip. 90° and above	32° and below		32° and below			0° and below
																			Max.	Min.	Max.	Min.		
(a)	30	30	30	30		30		11	30	30		30	30		11	11	11	11	11					
Jan	62.5	43.6	53.1	83	1952	12	1940	462	4.57	3.72	1959	0.3	3.0	1948	0	0	*	7	0	0	Jan			
Feb	65.8	46.7	56.3	89	1956	13	1951	310	4.38	6.30	1952	T	T	1964+	0	0	0	3	0	0	Feb			
Mar	71.4	51.4	61.4	95	1946	24	1943	195	2.82	2.89	1949	T	T	1965+	T	1965	0	0	1	0	0	Mar		
Apr	78.8	60.1	69.5	97	1948+	37	1940	35	4.43	4.97	1950	0	0	0	0	0	0	0	0	0	0	Apr		
May	85.9	67.7	76.8	97	1953	46	1954	*	4.79	9.46	1944	0	0	0	0	0	0	0	0	0	0	May		
Jun	91.6	73.3	82.5	101	1953+	58	1964	0	4.75	3.88	1946	0	0	0	0	0	0	23	0	0	0	Jun		
Jul	93.3	75.5	84.4	103	1944	66	1947	0	5.71	7.35	1942	0	0	0	0	0	0	28	0	0	0	Jul		
Aug	93.2	74.7	84.0	106	1947	62	1950	0	5.34	6.72	1940	0	0	0	0	0	0	25	0	0	0	Aug		
Sep	89.3	70.1	79.7	101	1954+	48	1942	*	5.30	11.67	1963	0	0	0	0	0	0	17	0	0	0	Sep		
Oct	82.7	60.5	71.6	98	1952	34	1957	30	3.19	8.42	1949	0	0	0	0	0	0	4	0	0	0	Oct		
Nov	71.2	50.4	60.8	89	1948	26	1959	167	4.54	7.70	1946	T	T	1950	0	0	0	5	0	0	1	Nov		
Dec	64.6	45.2	54.9	83	1943	20	1950	357	4.95	4.38	1949	T	T	1954	0	0	*	4	0	0	0	Dec		
Year	79.2	59.9	69.6	106	Aug. 1947	12	Jan. 1940	2141	54.77	11.67	Sept. 1963	0.3	3.0	Jan. 1948	T	Mar. 1965	71	106	*	16	0	Year		

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

* Less than one half.

** Base 65°F

THE CLIMATE OF BEAUMONT, TEXAS

Beaumont is located on the flat Coastal Plain in the extreme southeast corner of Texas, on the west bank of the Neches River, in the northeast corner of Jefferson County. Beaumont is the county seat, and is the hub of a highly industrialized area. A townsite was laid out in the mid-1830's. When Anthony P. Lucas' gusher blew in on January 10, 1901, the famed Spindletop oil field was discovered, and Beaumont became a boom town overnight. Today there are more than 30 oil refineries and chemical plants in Jefferson County. The city also enjoys a healthy economy as a major port and agriculture center. The Sabine-Neches ship channel handles 60 million tons annually.

Jefferson County is grassy plain, with forests in the northwest. Soils include beach sands, sandy loams, and black waxy clays. Rice is the leading crop. Beef cattle production is large. Besides 350 million barrels of oil produced in the county since 1901, mineral production includes sulphur, gas, salt, sand, and clays.

The climate of Beaumont is humid subtropical with warm summers. Average annual rainfall is 54.77 inches. Dynamically, the climate is monsoonal in nature with a reversal in the wind flow with the seasons. Prevailing winds are southerly February through August, and northerly September through January. The Gulf of Mexico source region, dominates the climate of the region, and accounts for the high humidity and high average rainfall. Cold air masses, greatly moderated in severity by the time they reach southeastern Texas, provide the stimulating effects of seasonal change.

Winter temperatures are exceptionally mild. In January, the coldest month, the minimum drops to 32°F or below, only about one night in four, on an average. Daily maximum temperatures average 64.3°F in the winter. The lowest temperature ever recorded at Beaumont (since 1899) is 4°F, which occurred on February 12, 1899. Cloudiness is most persistent during the winter and early spring months. Fog, most frequent in midwinter and rare in summer, usually dissipates before noon. The area receives about 47 percent of the total possible sunshine during the winter season.

Summers are warm and humid. Daytime temperature maxima are moderated by the prevailing off shore winds. Refrigerated air is recommended for maximum comfort indoors. The highest temperature ever recorded at Beaumont is 108°F, which occurred on July 14, 1902.

Rainfall is abundant, but considerable variation may occur from year to year. The greatest annual total of record was 95.28 inches in 1923, while the least was 25.57 inches in 1899. There is no significant seasonal bias in precipitation amounts; however, March is the driest month; July is the wettest. Since much of the precipitation is of the convective type and there is a plentiful supply of moisture, excessive rains of short duration are rather frequent. Thundershowers are most frequent during July and August. The most persistent rains are generally associated with warm fronts and stationery fronts during the colder season and with dissipating tropical cyclones during the summer and early fall. Snowfall is insignificant. No measurable amounts fell at Beaumont during the 18 year period, 1950-1967.

The growing season (freeze free period) averages 250 days. The average date of the last freeze in the spring is March 11, while the average date of the first freeze in the fall is November 16.

Average annual relative humidity is about 91 percent at 6:00 a.m., 62 percent at noon and 73 percent at 6:00 p.m., Central Standard Time. Seasonal averages vary only slightly. The area receives about 59 percent of the total possible sunshine annually. Mean annual lake evaporation is estimated at 51 inches.

Violent winds may accompany thunderstorms or tropical cyclones, but such occurrences are infrequent.

In summary, the climate of Beaumont is humid and subtropical with abundant rainfall. It is favorable for outdoor work or recreation during all seasons.

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1937	56.3	56.2	56.2	57.6	76.8	83.2	85.0	84.2	79.8	70.2	56.9	54.8	69.4
1938	56.0	60.8	68.0	67.8	76.0	81.6	83.0	83.4	77.8	72.7	59.2	55.2	70.1
1939	56.8	57.5	64.4	69.2	74.9	82.6	84.8	83.4	81.8	72.2	58.1	58.1	70.3
1940	42.6	53.3	62.2	67.5	74.9	80.2	81.4	81.0	80.6	69.4	60.6	59.2	67.4
1941	56.8	53.0	57.4	70.1	76.4	83.0	83.8	84.6	80.1	76.7	58.6	57.0	69.6
1942	50.7	54.2	61.4	67.9	76.0	82.1	83.0	83.6	79.0	74.4	67.4	59.2	69.9
1943	56.0	61.2	61.0	72.8	80.5	84.6	85.1	86.4	78.6	70.2	59.2	55.0	70.9
1944	54.1	59.4	64.3	70.9	75.8	85.4	86.2	85.8	81.0	71.0	62.4	51.4	71.0
1945	53.0	59.5	68.8	70.2	74.3	82.2	83.5	84.5	80.0	70.0	66.9	52.2	70.6
1946	53.9	57.2	65.4	73.1	77.0	80.8	84.0	84.8	80.1	73.0	65.2	60.4	71.3
1947	53.4	51.1	57.2	71.9	76.6	83.6	84.0	83.4	81.4	77.4	60.4	56.4	69.8
1948	48.2	56.1	64.1	74.0	78.9	87.7	87.6	86.2	78.6	70.9	61.9	59.3	70.9
1949	55.0	58.6	59.6	66.3	78.9	85.5	85.9	85.1	80.0	72.6	60.9	56.3	69.9
1950	53.3	60.9	67.0	78.2	82.8	80.2	82.8	84.3	79.4	72.5	59.4	53.5	69.8
1951	53.6	58.2	63.0	66.7	76.3	83.8	86.5	87.9	79.3	72.8	57.5	56.5	70.1
1952	52.6	58.2	60.1	65.6	75.4	84.3	84.2	86.3	79.6	65.3	59.4	51.7	69.4
1953	54.6	56.1	67.5	69.6	78.4	86.5	85.0	83.7	80.7	72.7	58.3	51.0	70.3
1954	54.9	60.6	59.7	72.9	72.8	83.6	85.0	85.3	81.9	73.4	58.7	56.6	70.5
1955	52.3	55.1	65.4	71.1	78.8	80.4	83.7	83.4	81.7	71.0	60.2	55.4	69.9
1956	52.2	58.2	61.2	67.6	79.4	81.4	84.8	84.3	79.9	72.7	59.4	54.0	70.1
1957	56.5	63.3	60.4	69.5	77.5	81.7	84.8	82.5	80.5	75.9	59.9	50.9	-
1958	-	49.2	58.5	66.9	77.5	84.0	86.3	84.3	80.5	69.9	61.6	50.9	-
1959	49.0	54.3	59.5	69.3	78.2	82.4	82.4	82.7	80.5	71.5	55.7	54.3	68.1
1960	49.9	49.3	55.2	70.2	74.4	80.0	82.1	80.4	78.6	73.0	62.2	51.5	67.8
1961	47.3	56.6	65.2	65.6	75.4	80.9	85.9	85.9	80.9	70.3	60.5	55.9	68.2
1962	48.2	63.5	57.1	67.7	78.1	80.9	85.9	85.9	80.9	74.2	58.8	52.3	69.5
1963	46.3	50.6	62.6	73.0	77.0	82.8	84.0	84.3	79.5	74.1	62.9	46.8	68.7
1964	49.7	49.8	60.3	71.0	77.0	82.1	83.2	84.9	79.0	67.5	64.5	53.0	68.5
1965	55.6	53.0	57.2	72.6	77.3	82.1	84.2	81.9	80.6	68.6	67.9	56.0	69.8
1966	46.8	51.5	58.2	68.9	75.3	79.8	85.4	82.9	78.4	-	-	-	-

STATION HISTORY

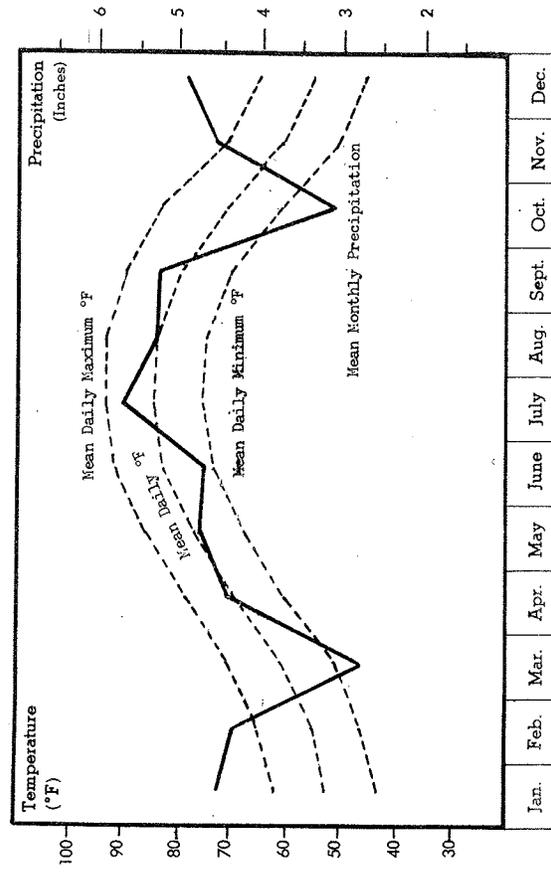
A climatological station was established at the Southern Pacific Watchhouse, 0.4 mile east of the Beaumont Post Office, in July 1898. Instrumental equipment consisted of a standard eight-inch rain gauge, maximum and minimum thermometers, and a cotton region shelter. A non-recording river gauge was installed on the railroad bridge across the Neches River on December 1, 1903. Precipitation records are complete since July 1898. Temperature data prior to 1920 are incomplete. Data are published monthly in CLIMATOLOGICAL DATA-TEXAS. Station No. 41-0611-8.

Weather Bureau State Climatologist
Environmental Science Services Administration
3600 Manor Road, Austin, Texas 78723
January 1968

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1937	4.61	1.16	3.80	0.63	1.38	6.20	2.14	5.33	4.36	5.45	1.69	3.71	40.46
1938	5.44	2.57	0.72	4.11	3.23	5.13	4.46	5.76	3.40	2.04	3.53	3.89	45.76
1939	6.73	3.17	0.70	2.06	3.40	3.18	5.33	6.49	0.83	0.42	4.34	2.90	39.57
1940	1.95	4.92	2.40	6.10	0.75	4.91	3.86	9.60	2.43	1.37	8.24	8.45	54.98
1941	3.06	2.51	4.18	3.24	14.55	7.52	8.34	3.42	9.44	6.64	2.80	2.53	68.23
1942	2.12	3.00	3.68	10.96	1.60	8.55	13.35	8.48	7.08	3.25	2.01	3.95	68.04
1943	5.46	2.98	5.15	2.33	6.25	3.39	14.35	2.28	6.52	0.60	3.57	5.48	58.36
1944	8.78	3.09	7.12	2.41	15.01	0.84	2.01	13.35	5.62	0.63	4.68	6.19	74.73
1945	3.66	4.72	2.34	8.96	1.57	7.26	5.81	8.99	0.74	8.82	3.54	9.26	65.67
1946	7.75	4.28	3.02	5.87	12.33	10.81	7.32	6.60	6.37	4.16	12.37	2.96	83.82
1947	5.69	0.84	4.65	1.56	5.90	5.07	0.90	6.97	1.88	0.58	6.98	3.15	44.17
1948	8.89	4.48	1.52	3.24	4.29	0.68	3.99	1.74	1.74	0.77	5.10	1.53	35.81
1949	6.81	9.26	7.55	7.02	0.35	6.11	10.39	4.33	7.76	16.86	2.24	8.72	87.40
1950	1.87	9.83	2.33	12.82	4.85	8.25	7.14	5.98	2.78	1.15	1.67	2.61	61.28
1951	7.88	2.45	4.03	0.26	2.55	0.57	4.25	2.19	11.08	0.86	2.16	5.02	46.30
1952	2.12	8.12	1.83	9.64	5.29	2.03	6.71	9.86	0.54	0	6.53	5.63	49.64
1953	1.37	5.83	1.20	3.20	9.65	4.39	7.14	9.86	1.52	1.93	3.96	7.24	57.29
1954	2.10	0.50	2.61	2.13	4.90	0.85	6.50	2.13	0.88	5.32	2.17	1.04	31.13
1955	6.15	4.47	0.16	3.35	7.04	4.61	3.41	5.62	2.48	0.43	2.00	4.44	44.16
1956	4.42	4.24	4.24	2.61	3.79	2.21	1.68	2.59	0.41	4.08	3.58	13.50	47.35
1957	0.83	1.38	6.39	9.64	1.74	10.25	1.72	5.26	9.60	5.76	6.34	3.00	61.91
1958	4.02	4.39	1.07	3.05	2.98	5.21	2.54	3.21	11.42	3.50	1.76	2.69	48.84
1959	8.88	11.53	0.99	8.64	4.80	2.85	13.50	6.93	3.36	4.71	2.83	2.63	67.65
1960	3.40	5.32	0.92	3.12	4.80	4.46	5.02	6.73	0.82	5.97	2.67	8.05	46.84
1961	11.52	7.89	1.00	2.91	3.99	11.57	8.47	2.71	5.78	0.22	8.57	3.96	68.59
1962	2.35	1.99	0.86	3.05	1.42	6.11	0.74	6.92	5.48	2.66	4.08	5.33	40.99
1963	4.07	4.02	0.64	1.18	1.47	3.14	8.31	0.28	19.74	0.11	8.81	3.45	55.22
1964	4.42	3.66	3.56	1.76	4.29	1.30	4.19	3.04	5.48	0.18	2.99	8.02	42.89
1965	1.48	2.85	3.89	1.98	2.36	3.23	1.92	3.43	7.91	0.63	3.14	5.96	38.78
1966	6.33	5.16	0.64	5.18	11.56	1.75	5.78	8.87	5.46	6.61	6.98	3.34	67.66

Monthly Temperatures and Precipitation



Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas 78712. Quantity rates upon request.